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FORM PTO-1449  
(REV. 7-80)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.: 464.1006 CON3

SERIAL NO.:  
09/688,572

LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT(S): SEUL, Michael

FILING DATE: October 17, 2000

GROUP: 1641

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
PTD	AA	3	9	9	8	5	2	5	12/21/76	Giglia	350	160	08/21/75
	AB	4	0	7	5	0	1	3	02/21/78	Ward et al.	96	1.5	09/13/76
	AC	4	4	5	6	5	1	3	06/26/84	Kawai et al.	204	180	08/25/82
	AD	4	5	7	5	4	0	7	03/11/86	Diller	204	67	10/24/84
	AE	4	5	9	1	5	5	0	05/27/86	Hafeman et al.	435	4	04/05/84
	AF	5	4	4	4	3	3	0	08/22/95	Leventis et al.	313	506	02/18/93
	AG	5	5	8	7	1	2	8	12/24/96	Wilding et al.	422	50	11/14/94
	AH	5	4	9	8	3	9	2	03/12/96	Wilding et al.	422	68.1	09/19/94
	AI	5	8	5	5	7	5	3	01/05/99	Trau et al.	204	484	11/26/96
PTD	AJ	6	0	3	3	5	4	7	03/07/00	Trau et al.	204	622	01/04/99
	AK												

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	AL	9	6	0	4	5	4	7	02/15/96	PCT	G01N	27/00		X
	AM													
	AN													
	AO													
	AP													

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PTD	AR	Yeh, et al., "Assembly of ordered colloidal aggregates by electric-field-induced fluid flow," <i>Nature</i> , vol. 386.6: 57-59 (1997)
I	AS	Giersig et al., "Formation of ordered two-dimensional gold colloid lattices by electrophoretic deposition," <i>J. Phys. Chem.</i> , vol. 97: 6334-6336
PTD	AT	Seul et al., "Scale transformation of magnetic bubble arrays: coupling of topological disorder and polydispersity," <i>Science</i> , vol. 262 : 558 - 560 (1993)

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*[Signature]*

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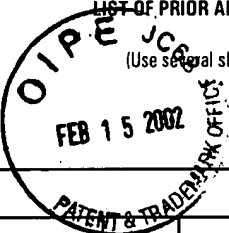
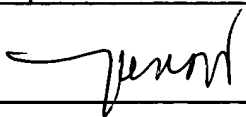
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*EXAMINER INITIAL		DOCUMENT NUMBER						DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	BA												
	BB												
	BC												
	BD												
	BE												
	BF												
FOREIGN PATENT DOCUMENTS													
		DOCUMENT NUMBER						DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
												YES	NO
	BG												
	BH												
	BI												
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)													
1090	BJ	Trau et al., "Field-Induced Layering of Colloidal Crystals," <i>Science</i> , vol. 272 : 706-709 (1996)											
	BK	Seul et al., "Domain Shapes and Patterns: The Phenomenology of modulated Phases," <i>Science</i> , vol. 267 : 476-483 (1995)											
	BL	Schena et al. "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray," <i>Science</i> , vol. 270 : 467-470 (1995)											
	BM	Haab et al. "Single Molecule Fluorescence Burst Detection of DNA Fragments Separated by Capillary Electrophoresis," <i>Analytical Chemistry</i> , vol. 67 (No. 18) : 3253-3256 (1995)											
	BN	Richetti, et al., <i>J. Physique Lettr.</i> , vol. 45 : L-1137 to L-1143 (1984)											
1090	BO	Sze, "MIS Diode and Charge-Coupled Device," <i>The Physics of Semiconductors</i> , Chapter 7, pp. 362-430 (2 <sup>nd</sup> Edition) (Wiley Interscience 1981)											
	BP												
	BQ												
	BR												
EXAMINER 									DATE CONSIDERED 6/24/01				
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*EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
PST	AA	4	4	9	9	0	5	2	2/12/85	Fulwyler	422	52	8/30/82	
	AB	4	6	4	7	5	4	4	3/3/87	Nicoli et al.	436	518	6/25/85	
	AC	4	8	2	2	7	4	6	4/18/89	Walt	436	528	6/25/86	
	AD	4	9	9	4	3	7	3	2/19/91	Stavrianopoulos et al.	435	6	7/20/89	
	AE	5	0	0	2	8	6	7	3/26/91	Macevitz	435	6	10/24/88	
	AF	5	0	2	8	5	4	5	7/2/91	Soini	436	501	6/9/88	
	AG	5	1	0	5	3	0	5	4/14/92	Betzig	359	368	1/10/91	
	AH	5	1	1	4	8	6	4	5/19/92	Walt	436	528	9/19/89	
	AI	5	1	3	2	2	4	2	7/21/92	Cheung	436	501	11/13/89	
	AJ	5	1	3	2	0	9	7	7/21/92	Van Deusen et al.	422	82.09	9/4/90	
PST	AK	5	1	4	3	8	5	3	9/1/92	Walt	436	501	2/2/89	
FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
PST	AL	0	2	6	9	7	6	4	6/8/88	EP	C12Q	1/68		X
	AM	0	4	7	8	3	1	9	4/1/92	EP	C12Q	1/68		X
	AN	0	7	2	3	1	4	6	7/24/96	EP	G01N	21/64		X
	AO	8	9	1	1	1	0	1	11/16/89	PCT	G01N	33/546		X
PST	AP	9	3	0	2	3	6	0	2/4/93	PCT	G01N	33/536		X
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)														
PST	AQ	Peterson, et al. "Fiber optic pH probe for physiological use," Anal. Chem. Vol. 52, 864-869 (1980)												
	AR	Peterson, et al. "Fiber-Optic Sensors for Biomedical Applications," Science, 13: 123-127 (1984).												
PST	AS	Fuh, et al., "Single Fibre Optic Fluorescence pH Probe," Analyst, 112: 1159-1163 (1987).												
EXAMINER										DATE CONSIDERED				
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pd	BA	5	1	9	4	3	0	0		3/16/93	Cheung	427	213.31	1/8/89
	BB	5	2	4	4	8	1	3		9/14/93	Walt et al.	436	172	4/20/92
	BC	5	2	4	4	6	3	6		9/14/93	Walt et al.	422	82.07	7/25/91
	BD	5	2	5	0	2	6	4		10/5/93	Walt et al.	422	82.07	9/21/92
	BE	5	2	5	2	4	9	4		10/12/93	Walt	436	528	9/20/92
	BF	5	2	5	4	4	7	7		10/19/93	Walt	436	172	9/19/91
	BG	5	2	9	8	7	4	1		3/29/94	Walt et al.	250	227.23	1/13/93
	BH	5	3	0	6	6	1	8		4/26/94	Prober et al.	435	6	1/16/92
	BI	5	3	2	0	8	1	4		6/14/94	Walt et al.	422	82.07	11/25/92
pd	BJ	5	3	6	2	6	5	3		11/8/94	Carr et al.	436	165	5/6/92
	BK	5	4	0	5	7	8	4		4/11/95	Van Hoegaerden	436	523	2/25/93

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
														YES	NO
pd	BL	9	3	0	6	1	2	1		4/1/93	PCT	C07H	21/00		X
	BM	9	3	2	4	5	1	7		12/9/93	PCT	C07K			X
pd	BN	9	7	1	4	0	2	8		4/17/97	PCT	G01N	15/10		X
	BO														
	BP														

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

pd	BQ	Barnard, et al., "A fibre-optic chemical sensor with discrete sensing sites," Nature, vol. 353: 338-340 (1991).
	BR	Campian, et al. "Colored and Fluorescent Solid Supports," Innovation and Perspectives in Solid-Phase Synthesis. Ed: E. Birmingham (Mayflower, London), pp. 469-472 (1994).
pd	BS	Pope, "Fiber optic chemical microsensors employing optically active silica microspheres," SPIE, vol. 2388: 245-256 (1995).

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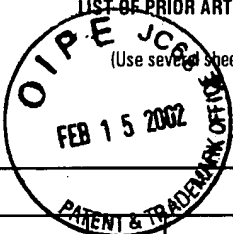
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120	CA	5	4	8	0	7	2	3	1/2/96	Klainer et al.	427	441	5/1/94
	CB	5	8	1	4	5	2	4	9/29/98	Walt et al.	436	518	12/14/95
	CC	5	4	9	6	9	9	7	3/5/96	Pope	250	227	1/3/94
	CD	5	5	1	2	4	9	0	4/30/96	Walt et al.	436	171	1/3/94
	CE	5	5	6	5	3	2	4	10/15/96	Still et al.	435	6	4/13/94
	CF	5	5	6	7	6	2	7	10/22/96	Lehnen	436	518	11/5/93
	CG	5	6	3	3	7	2	4	5/27/97	King et al.	356	445	8/29/95
	CH	5	6	3	3	9	7	2	5/27/97	Walt et al.	385	116	11/29/95
	CI	5	6	5	0	4	8	9	7/22/97	Lam et al.	530	334	6/19/91
120	CJ	5	6	5	2	0	5	9	7/29/97	Margel	428	403	1/25/95
	CK	5	6	7	4	6	9	8	10/7/97	Zarling et al.	435	7.92	3/30/95

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		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	CL													
	CM													
	CN													
	CO													
	CP													

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

120	CQ	Grazia et al., "In-vivo biomedical monitoring by Fiber-Optic System," Journal of Lightwave Technology, 13, 1396-1406 (1995).
120	CR	Bangs, "Immunological Applications of Microspheres," The Latex Course, Bangs Laboratories (April 1996)
120	CS	"Fluorescent Microspheres (Tech. Note #19)," Bangs Laboratories (1997)

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PPP	DA	5	6	9	0	8	9	4	11/25/97	Pinkel et al.	422	68.1	5/24/95
	DB	5	7	0	0	8	9	7	12/23/97	Klainer et al.	528	15	5/30/95
	DC	5	7	7	9	9	7	6	7/14/98	Leland et al.	422	52	6/5/95
	DD	5	9	3	9	0	2	1	8/17/99	Hansen et al.	422	55	1/23/97
	DE	5	9	6	1	9	2	3	10/5/99	Nova et al.	422	68.1	9/30/96
	DF	5	9	6	5	4	5	2	10/12/99	Kovacs	436	149	7/9/96
	DG	6	0	4	8	6	9	0	4/11/00	Heller et al.	435	6	5/14/97
	DH	6	0	9	0	5	4	5	7/18/00	Wohlstadter et al.	435	6	8/9/97
	DI	6	0	9	0	9	1	2	7/18/00	Lebl et al.	530	300	11/1/99
PM	DJ	6	2	0	0	7	3	7	3/13/01	Walt et al.	430	320	8/24/95
	DK												

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		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	DL												
	DM												
	DN												
	DO												
	DP												

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

PM	DQ	Egner, et al., "Tagging in combinatorial chemistry: the use of coloured and fluorescent beads," Chem. Commun. pp. 735-736 (1997)
PM	DR	Fulton, et al., "Advanced multiplexed analysis with the FlowMetrix system," Clinical Chemistry, vol. 43:9, pp. 1749-1756 (1997).
PM	DS	Scott et al., "Properties of fluorophores on solid phase resins; implications for screening, encoding and reaction monitoring," Bioorganic & Medicinal Chemistry Letters, 7:12, pp. 1567-1572 (1997).

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	EL							
	EM							
	EN							
	EO							
	EP							

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EQ	Healey et al., "Fiberoptic DNA sensor array capable of detecting point mutations," Analytical Biochemistry, vol. 251, pp. 270-279 (1997).
ER	"Microsphere Selection Guide," Bangs Laboratories, Inc. (Fisher, IN) (September 1998)
ES	

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